

State of Utah

Department of Natural Resources

ROBERT L. MORGAN Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT Acting Division Director OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

• FILED

JAN 10 2005

SECRETARY, BOARD OF OIL, GAS & MINING

January 10, 2005

TO:

Board of Oil, Gas & Mining

THRU:

Mary Ann Wright, Acting Director

THRU:

Mark Mesch, Acting Associate Director

THRU:

Daron R. Haddock, Permit Supervisor

FROM:

Thomas Munson, Environmental Scientist/ Reclamation Hydrologist

SUBJECT:

Request For Partial Release of Self Bond Surety, Barrick Resources

(USA) Inc, Mercur Mine, M/045/017, Tooele County, Utah

Barrick Resources seeks the Board's approval for reduction in the self bonding surety agreement for Barrick Resources (USA) Inc.'s Mercur mine located in Tooele County. Notification of the board hearing was sent to the local newspapers on November 10, 2004. No adverse comments have been received for releases of this project to date.

The operator has provided the Division with a Reclamation Contract and self-bonding surety agreement in the amount of \$8,509,500. The company is asking for release of 775.3 acres and reduction in bonding of \$3,743,148. This leaves \$4,766,352 for reclamation of 217 acres or \$21,964/acre of remaining area. This amount is considered more than adequate to complete the remaining reclamation projects. The Division's financial auditor has checked the financial stability of Barrick Resources (USA) Inc. and finds it surpasses the minimum specifications for self-bonding (copy enclosed).

The Division has inspected the site (inspection memo enclosed) and finds that the requested areas have been satisfactorily reclaimed and revegetated as required by rules and reclamation contract. Also enclosed is a Bond Release Findings document which outlines the requirements associated with reclamation of the site.

Pursuant to provision #6 of the Reclamation Contract, the Division hereby certifies that Barrick Resources (USA) Inc., has reclaimed 775.3 acres of the disturbed area in accordance with the Act and implementing rules, the Notice of Intention, as amended and the reclamation plan, as amended. We recommend that the Board release Barrick Resources from reclamation liability for this acreage in the amount of \$3,743,148. Thank you for your time and consideration of this request.

TM:jb
Attachments: auditor report, inspection memo, Bond Release Findings
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Department of Natural Resources

ROBERT L. MORGAN Executive Director

Division of Oil, Gas & Mining

LOWELL P. BRAXTON
Division Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

November 23, 2004

To:

Mark Mesch, Acting Associate Director of Mining

Thru:

Daron Haddock, Minerals Permit Supervisor

From:

Steve Schneider, Oil & Gas Audit Manager

Re:

Barrick Gold Corporation Financial Review

Pursuant to Mary Ann Wright's request, I have reviewed the self-bonding qualification sheet and the current annual report provided by Barrick Gold Corporation on November 19, 2004. In addition, I have secured the Barrick Gold Corporation financial statements for the most current quarter, September 30, 2004, and for two prior years from Barrick's corporate web site.

Barrick Gold Corporation's financial condition, as shown on the attached schedule, clearly surpasses the minimum specifications for self-bonding established by the Board of Oil, Gas & Mining.

I can be reached at 538-5328 if there are additional questions.

Attachment



# BARRICK GOLD CORPORATION

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	9/30/2004
Current Assets / Current Liabilities (Minimum of 1.2)	1.98	1.91	2.74	3.90	2.74
Total Liabilities / Net Worth (Maximum of 2.5)	0.69	0.63	0.58	0.53	0.59

# FINANCIAL STATEMENT DATA (Millions of Dollars, Worldwide)

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	9/30/2004
Current Assets	1,166	1,014	1,322	1,365	1,171
Current Liabilities	590	530	483	350	428
Total Liabilities	2,203	2,010	1,927	1,868	2,005
Tangible Net Worth (Minimum of 10 Million)	3,190	3,192	3,334	3,494	3,380
Fixed Assets Worldwide Fixed Assets in United States (Minimum of 20 Million in U.S.)	3,994 1,712	3,912 1,776	3,311 1,575	3,131 1,447	3,326 N/A

N/A = Not available since prepared annually.

Prepared by: Steve Schneider

Utah Division of Oil, Gas & Mining

11/23/2004





# DEPARTMENT OF NATURAL RESOURCES Division of Oil, Gas & Mining

ROBERT L. MORGAN Executive Director

LOWELL P. BRAXTON Division Director



# **Inspection Report** Minerals Regulatory Program Report Date: November 24, 2004

Mine Name: Mercur Mine	
Operator or Permittee Name:	
Barrick Resources (USA) Inc.	
Permittee Mailing Address:	
136 E. South Temple, Ste. 1300, PO Box 1124	40
Salt Lake City 11tah 84147-2410	

**Inspector(s):** Tom Munson, DOGM

Other Participants: DOGM: Mary Ann Wright, Associate Director - Mining Wayne Hedberg, Hardrock Permits Supervisor Daron Haddock, Coal Permit Supervisor Susan White, Mining Program Coordinator Joelle Burns, Engineering Technician Doug Jensen, Reclamation Specialist Lynn Kunzler, Senior Reclamation Biologist Barrick Resources: Rocky Chase-North America Head Glenn Eurick-Consultant Walt Shubert- On-site coordinator Steve Viert-Cedar Creek Consultants- Reveg. Dane O'Sadnick- Engineer of Record

Permit Status: Reclaiming Current Acreages: Total Permitted (Bonded): 1762.7 acres Total Disturbed: 1762.7 acres

8. Erosion Control

Permit number: M045/017 Inspection Date: 06/02/2004

Weather: sunny, warm

Inspection Start Time: 9:00 a.m. Inspection End Time: 1:00 p.m.

Site location/Area Inspected (i.e. Pit #):

Surface Ownership: Private and BLM Mineral Ownership: Private and BLM

Entire Permitted Area

Mineral Mined: Gold

Type of Mine: open pit

Elements of Inspection	Evaluated	N/A	Comment	Enforcement
1. Permits, Revisions, Transfer, Bonds	$\boxtimes$		$\boxtimes$	
2. Public Safety (open shafts, adits, trash,	$\Box$		П	
signs, highwalls)			لــا	Ш
3. Protection of Drainages	$\boxtimes$		$\boxtimes$	
4. Explosives, magazines				
5. Deleterious Material				
6. Roads (maintenance, surfacing, dust contro	l, 🖂		$\square$	
safety)		Ш		LJ
7. Concurrent Reclamation				
8. Erosion Control	$\boxtimes$		$\boxtimes$	



Page 2 of 3 M/045/017	Report Date: No	ovember 24, 2004	<del>1</del>		
<ul> <li>9. Demolition</li> <li>10. Backfilling and Grading (tr roads, highwalls, shafts, drill ho</li> <li>11. Water Impoundments</li> <li>12. Soils</li> <li>13. Revegetation</li> <li>14. Air Quality</li> <li>15. Other</li> </ul>	-				
Purpose of Inspection:  The purpose of this inspection and the purpose of this inspection and the purpose of this inspection.			scertain if it wo	ould be approp	priate
	Mercur/Sacran Reference Are Rover slump North Mercur Golden Gate/N Golden Gate S Valley Fill Lea Valley Fill Lea Reservation Ca East Bay Reter Drought Impac Rodent Issue Insect Issue Access Issues Schedule Field S the par Augus comple	Face Marion/Carrie State Marion/Carrie State Marion/Carrie State Mach Area 2 Mach Area 3 Marion Tailing Impartion Basin Marion Basin Ma	eel Area usin (South) npoundment / South that field survest application value as appropri	reys in suppor vill commence iate until	e in
6. Roads (maintenance, suapproved for post mine remaining roads hinges property boundary have site and will remain as	land use will be on talks with T been reclaimed	e taken out and ro ooele County. A d. Any remainin	eclaimed. The all exploration in g roads are for	final plans for roads within tl	r any he

~ <sub>3</sub> c a \*

Inspection Date: June 2, 2004; Report Date: November 24, 2004

Page 3 of 3 M/045/017

- 8. Erosion Control The site was stable in all areas that have been identified as releasable due to revegetation success. There are some areas that are being monitored for erosion stability and will be treated if necessary. These area are not included in the release request. These area are not included in the release request. There were three areas we specifically looked at that are related to stability. These areas are identified as follows: Rover Slide Area, Golden Gate Pit, and the Spillway Channel.
  - -The Rover Slide Area will be watched for a couple of years to determine its stability. Appropriate measures will be taken, if necessary, to stabilize this area.
  - -The south rim of the Golden Gate pit is an old slide area and will be monitored for several years to determine the best approach to stabilize this area including regrading, and/or surface water controls.
  - -The Spillway Channel has a spring that outcrops above the channel that causes some stability problems. A French drain has been installed to depressurize the slope and drain the spring into the spillway.
- 10. Backfilling and Grading (trenches, pits, roads, high walls, shafts, drill holes) All backfilling and grading accomplished in the areas the operator is requesting to be released is appropriately completed and is considered adequate for release.
- 11. Water Impoundments The Reservation Canyon Tailing Impoundment remains under closure procedures, awaiting final evaporation of the east bay waters.
- 13. Revegetation Areas inspected during this visit appeared visually to meet or exceed the revegetation standards. It was requested that the operator provide the Division with the appropriate revegetation data to support any kind of release of the areas visited.
- 15. Other rodents and insect infestations were discussed. It was determined that if they were to become a major problem that the necessary controls would be implemented to eradicate or control the pests.

Munsige Date: November 24, 2004

#### Directions to the site:

The site is about ½ hour south of Tooele, Utah.

GPS data:

None taken during this inspection.

Inspector's Signature

TM:jb

cc: Rocky Chase, Barrick Mercur

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# State of Utah DEPARTMENT OF NATURAL RESOURCES Division of Oil, Gas & Mining

ROBERT L. MORGAN Executive Director

MARY ANN WRIGHT Acting Division Director

# **Bond Release Findings**

January 10, 2005

Mine Name: Mercur Mine Operator: Barrick Mercur Gold Mines, Inc.  136 East South Temple, Suite 1300 P.O. Box 112410	I.D. No.: M/045/017  Mineral Ownership: Fee /Federal/State  Surface Ownership: Fee  Permit Term: 1981
Salt Lake City, Utah 84147-2410	
Total Acres Bonded and Disturbed	
Variance Areas 186.7 *	
Stability Monitoring	
<b>Unreclaimed</b> 36.3	
Graded and Seeded	
Total Remaining Bonded Acres 403.7	
# A	• • • • •

<sup>\*</sup> Acreage of areas identified by Barrick and subject to future Division evaluation.

#### Surety

Amount: <u>\$8,509,500</u>

Form: Self-Bonding and Indemnity Agreement Renewable Term: 5 years (2002 dollars) Amount to be Released \$3,743,148

#### **PROPOSAL**

Barrick Mercur Gold Mines, Inc. has requested full release of a portion of the Mercur Mine consisting of 775.3 acres. This area is identified in green on the Mercur General Site Plan Map, revised 2004, and labeled Surety Release Areas Drawing 1.

### BACKGROUND

#### **Setting and Premining Environment:**

The Mercur Mine is located in Tooele county about 21 miles south of Tooele off State Highway 73, three miles up Mercur Canyon. Prior to the Mercur Mine, the site was used for mining, recreation, wildlife and limited grazing. The vegetation is grassland, pinyon-juniper woodland, mountain brush, and sagebrush steepe. The site is being reclaimed to a grass/forb community. Mercur Canyon is a steep west-facing canyon and receives about 18 inches of precipitation per year. All drainage is ephemeral and flows only in response to rain events and snow melt.

#### **Operations**:

Historically, the area was mined for silver. In 1883 the gold ledge was found as cyanide gold processing was developed. The mine operated off and on from 1883 to 1942 and mining was not reinitiated until 1981. The gold mining operation



Bond Release Findings Page 2 of 5 Mercur Mine M/047/017 January 10, 2005

changed ownership in 1981, from Getty Mining Company to Texaco, Inc. and subsequently to Barrick Resources (USA) Inc. (Barrick) in July 1985.

The Mercur Mine has operated under a Notice of Intention to Commence Large Mining Operations filed March 9, 1981. The Utah Division of Oil, Gas and Mining (DOGM) approved the precious metal mining operation that included open pit mines, crushing and milling facilities, beneficiation circuits utilizing tank-leach cyanidation and alkaline autoclaving of carbonaceous ores, ancillary facilities, tailing impoundment, and three valley fill heap leach facilities used to beneficiate low grade oxide ore. The majority of surface disturbance was limited to Mercur Canyon. Deleterious materials used during the mining operations are those associated with milling, cyanide heap leaching and processing of gold. None of these deleterious processing materials remain on site within the areas requested for release (see attached November 24, 2004 inspection). Under the previously approved 1998 amended NOI, the Phoenix Pit was not developed and the Rover Pit exhausted. The Golden Gate tailing, deposited in the mid - 1890's through early 1900's, was re-processed in the later stages of precious metal production.

#### Reclamation:

Mining and milling operations ceased in the spring of 1998. A Notice of Intent to Amend Mining and Reclamation Plan (MRP) M/045/017-88(1) was submitted to the UDOGM in July 1998, finalizing conditions at the end of operations and presenting the full-scale reclamation plans to be implemented. The July 1998 amended NOI also reflects UDOGM concurrence and granting approval June 23, 1998 for the proposed reclamation plans and acknowledging the requested variances.

Two open pits permitted in the original Plan of Operations, Mercur and Marion Hill, the adjacent waste rock disposal areas, and Valley Fill Leach Areas 1, 2, and 3 have been closed. Valley Fill Leach Area 3 is currently undergoing final water management closure procedures. The Sacramento, Lady May, and Golden-Gate pits, permitted initially with the original pits but developed at later dates, have also been closed.

Current activity at the Mercur Mine consists of reclamation and water management. All milling and ancillary facilities, with the exception of the Administration building and a few support structures, have been demolished and removed. The Reservation Canyon Tailing Impoundment remains under closure procedures, waiting final evaporation of the East Bay waters. Upon completion of this evaporation effort, the East Bay will be sealed and covered similarly to the tailing impoundment and revegetated.

The postmining land will be used for livestock grazing, recreational uses, and wildlife habitat. These uses are consistent with local environmental conditions and land management practices.

#### MINE ENGINEERING

# Public Safety:

The mine operation has installed berms, barriers, and fences to ameliorate any safety hazards left at the mine. Access to the canyon is restricted by an access gate through a single access point. All deleterious chemicals and materials have been removed from the site (per the November 24, 2004 inspection).

Bond Release Findings Page 3 of 5 Mercur Mine M/047/017 January 10, 2005

# Slopes and Highwalls:

# There are no highwalls in the area being evaluated for bond release.

Waste dump slopes in the areas visited on the site inspection of November 24, 2004, were evaluated. Reclamation and recontouring in the areas visited was completed more than five years prior to our site inspection. To date, none of these slopes exhibit any stability problems. The slopes inspected did not exhibit any rilling or gullying due to precipitation events at the site. Vegetation has become well established on these areas and should contribute to the continued stability within the areas requested to be released.

# Applicable variance granted in original permit:

R647-4-111-6 - Slopes - Waste rock slopes will be regraded to maximum stable slopes of 2:1 except for limited portions of the eastern section of the North Mercur waste rock disposal area, which may be left at the angle of repose. Regrading this existing slope may not be possible because the toe of the slope will be located at the top of an open pit highwall. This portion of the slope will be reseeded, mulched and fertilized at this steeper slope, using broadcast or hydro seeder methods.

The waste rock slopes have been graded in accordance with the granted variance and are considered stable (see attached November 24, 2004 inspection).

Other variances and variance areas, proposed/to be reviewed):

Variances from reclamation standards have been granted but acreage to be governed by the variances and compliance subject to the variances are still to be determined by the Division when Barrick requests release.

#### Roads

All roads remaining onsite are considered part of the post mine land use and will be incorporated into the Tooele County road system. All other roads will be reclaimed at final reclamation. There are some roads within the released acreage that are needed for future reclamation and operation activities, but they will e reclaimed prior to final bond release. These roads are to be determined jointly by the County and Barrick. The release of acreage is subject to this additional reclamation.

# **HYDROLOGY**

#### Drainages:

All drainages at the Mercur Mine are ephemeral in nature and flow only in response to storm events. The designs for the drainage channels are conservative. All channels surrounding pits or heap leach pads were designed for the 100 year-24 hour storm event, with all other complimentary channels designed to carry the 100 year-6 hour storm event. The channels were riprapped or protected depending on slopes and velocity of flow. During the November 24, 2004 inspection visual observations revealed that all channels are stable with no erosion or channel failure.

Bond Release Findings Page 4 of 5 Mercur Mine M/047/017 January 10, 2005

# Dams, Impoundments, Trenches, and Pits:

There are no pits or impoundments being evaluated for bond release.

The tailings impoundment is still being reclaimed in order that remaining water contained in the tailings impoundment can be evaporated and reclamation completed. The Golden Gate basin and Sacramento pit have been designed to accept surface water. They are functioning as intended (see attached November 24,2004 inspection).

#### **Erosion Control**:

The erosion control on areas not associated with channels is adequate vegetation. Since the areas requested for release are adequately revegetated, the site has remained stable and there is no area where excessive erosion has occurred (see attached November 24, 2004 inspection).

# Hole Plugging:

All exploration drill holes that were not consumed by mining were plugged with cuttings and a five-foot cement surface plug.

# Water Monitoring:

All remaining water quality monitoring requirements are being carried out under the direction of the Utah Division of Water Quality and have been consolidated into one ground water permit (covering Area #3 heap leach pad and the tailings impoundment) which is in effect through the year 2007. Monitoring requirements can be referenced in the actual permit #UGW450002 by contacting the Utah Division Of Water Quality. No dangerous or hazardous ground water plumes or surface water runoff are currently known to exist which could potentially effect any known ground water resources approximately 2,000 feet below the surface.

#### Variance Areas:

Variances have been granted for highwalls by the Division and approved by the Board. None of the areas included in this request for bond release include high walls or other factors included in the variances granted. The area identified as variance areas are subject to further review by the Division for compliance with reclamation standards in accordance with variances granted.

# REVEGETATION

Areas evaluated for revegetation success were seeded between 1995 and 2001. Species selection was based on site adaptability and meeting the needs of the postmining land use of grazing and wildlife habitat (i.e. forage and/or cover for wildlife species and domestic grazing animals that would frequent the area). Revegetation success was evaluated by Cedar Creek Associates, Inc. July 28-31, 2004. A reference area adjacent to the site was selected for making comparisons and approved by the Division during a June 2, 2004 site inspection.

Noxious weeds do not appear to be a problem at the Mercur Mine. In 1999, five noxious weed species were observed on the property. At this time the mine began an aggressive weed control program. During the July 2004 sampling only four of the weed species were observed. Only one was recorded in the sample transects (transects

Bond Release Findings Page 5 of 5 Mercur Mine M/047/017 January 10, 2005

were systematically placed on a 400' X 400' grid). The mine intends to continue the weed control program for the next several years.

As per R647-4-111.13, "Revegetation shall be considered accomplished when the revegetation has achieved 70% of the premining vegetative ground cover...or of an adjacent undisturbed area that is representative of the premining ground cover...and the vegetation has survived three growing seasons." Results of vegetation sampling in 2004 (per report dated October 2004), showed the reference area to have 30.4% ground cover. The revegetation cover standard for determining success is calculated to be 21.3%. Results of vegetation sampling on the reclaimed areas showed 47.2% ground cover. This exceeds the revegetation success criteria by more than 2 fold. While no statistical data was collected during a June 2, 2004 site inspection, observations of the reclaimed area are consistent with the Cedar Creek Associates' report. Cover and species diversity are considered adequate for meeting the postmining land use of grazing and wildlife habitat. Thus revegetation is determined to be successful.

### RECOMMENDATION

It is the opinion of the Division's technical specialists that the areas requested for bond release quality for release based on our inspection of the property on November 24, 2004, and the supporting information presented by Barrick Mercur. It is the Division's recommendation that the Board of Oil, Gas and Mining grant the request for partial reduction in bond amount and release of the 775.3 acres identified, subject to the subsequent identification and reclamation of roads that will not be approved as public roads by Tooele County. The amount of bond released would be \$3,743,148. This leaves \$4,766,352, a more than adequate amount to complete the reclamation of the remaining 403.7 acres.

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